AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Please cancel claims 1–19 and 29–32 without prejudice.

LISTING OF CLAIMS

1-19. (Canceled).

20. (Previously presented) A compound comprising an amino acid sequence of from 1 to about 5 amino acid residues having an N-terminal blocking group and a C-terminal Asp residue connected to an electronegative leaving group, wherein said amino acid sequence substantially corresponds to at least a portion of the sequence Ala—Tyr—Val—His—Asp, residues 112 to 116 of Seq. I.D. No. 3.

21. (Currently amended) The compound according to claim 20 having the formula:

$$Z-Q_2-Asp-Q_1$$

where Z is an N-terminal protecting group,

 Q_2 is [[0]] $\underline{1}$ to 4 amino acids such that the sequence Q_2 -Asp substantially corresponds to at least a portion of the sequence Ala-Tyr-Val-His-Asp, residues 112 to 116 of Seq. I.D. No. 3; and

 Q_1 is an electronegative leaving group.

- 22. (Original) The compound according to claim 21, wherein Z is C_1 – C_6 alkyl, benzyl, acetyl, C_1 – C_6 alkoxycarbonyl, benzyloxycarbonyl or C_1 – C_6 alkyl carbonyl.
- 23. (Original) The compound according to claim 21 wherein Z is t-butoxycarbonyl, acetyl or benzyloxycarbonyl.

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24. (Original) The compound according to claim 21 wherein Q_1 is an aldehyde, a diazomethyl ketone or a halomethyl ketone.

25. (Original) The compound according to claim 21 wherein Q_1 is fluoromethyl ketone.

26-27. (Canceled).

28. (Currently amended) A pharmaceutical composition comprising a physiologically acceptable carrier and a compound according to any one of claims 20–25 of the formula:

where Z is an N-terminal protecting group;

Q₂ is [[0]] 1 to 4 amino acids such that Q₂. Asp substantially corresponds to at least a portion of the sequence Ala. Tyr. Val. His. Asp, residues 112 to 116 of Seq. I.D. No. 3; and

Q₁ is an electronegative leaving group.

35. (Original) A method of inhibiting IL-1 β protease activity in a mammal in need of such treatment comprising administering to said mammal an effective inhibitory amount of a compound of the formula:

$$Z-Q_2-Asp-Q_1$$

where Z is an N-terminal protecting group;

Q₂ is 0 to 4 amino acids such that Q₂-Asp substantially corresponds to at least a portion of the sequence Ala-Tyr-Val-His-Asp, residues 112 to 116 of Seq. I.D. No. 3; and

 Q_1 is an electronegative leaving group.

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36. (Original) The method according to claim 35 wherein Z is C_1 – C_6 alkyl, benzyl, acetyl, C_1 – C_6 alkoxycarbonyl, benzyloxycarbonyl or C_1 – C_6 alkyl carbonyl.

- 37. (Original) The method according to claim 35 wherein Z is t-butoxycarbonyl, acetyl or benzyloxycarbonyl.
- 38. (Original) The method according to claim 35 wherein Q_1 is an aldehyde, a diazomethyl ketone or a halomethyl ketone.

39-40. (Canceled).

- 41. (Original) The method according to claim 35 wherein Q_1 is an aldehyde and inhibiting is reversibly inhibiting.
- 42. (Original) The method according to claim 35 wherein Q_1 is a fluoromethyl ketone and inhibiting is irreversibly inhibiting.
- 43. (Currently amended) A method of treating inflammation or treating an autoimmune disease in a mammal in need of such treatment comprising administering to said mammal an effective amount of a compound of the formula:

$$Z-Q_2-Asp-Q_1$$

where Z is an N-terminal protecting group;

Q₂ is 0 to 4 amino acids such that the sequence Q₂—Asp substantially corresponds to at least a portion of the sequence Ala–Tyr–Val–His–Asp, residues 112 to 116 of Seq. I.D. No. 3; and Q₁ is an electronegative leaving group.

- 44. (Original) The method according to claim 43 wherein Z is C_1 – C_6 alkyl, benzyl, acetyl, C_1 – C_6 alkoxycarbonyl, benzyloxycarbonyl or C_1 – C_6 alkyl carbonyl.
- 45. (Original) The method according to claim 43 wherein Z is t-butoxycarbonyl, acetyl or benzyloxycarbonyl.

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46. (Original) The method according to claim 43 wherein Q_1 is an aldehyde, a diazomethyl ketone or a halomethyl ketone.

47-49. (Canceled).

50. (New) A method of treating arthritis in a mammal in need of such treatment comprising administering to said mammal an effective amount of a compound of the formula:

$$Z-Q_2-Asp-Q_1$$

where Z is an N-terminal protecting group;

 Q_2 is 0 to 4 amino acids such that the sequence Q_2 -Asp substantially corresponds to at least a portion of the sequence Ala-Tyr-Val-His-Asp, residues 112 to 116 of Seq. I.D. No. 3; and Q_1 is an electronegative leaving group.

- 51. (New) The method according to claim 50 wherein Z is C_1 – C_6 alkyl, benzyl, acetyl, C_1 – C_6 alkoxycarbonyl, benzyloxycarbonyl or C_1 – C_6 alkyl carbonyl.
- 52. (New) The method according to claim 50 wherein Z is t-butoxycarbonyl, acetyl or benzyloxycarbonyl.
- 53. (New) The method according to claim 50 wherein Q_1 is an aldehyde, a diazomethyl ketone or a halomethyl ketone.